$\beta_{ij}$ 

to compare the determined x-ray property of said unknown material in the "object" regions to the corresponding property of the specific material of interest to determine if the "object" regions are likely to contain the specific material of interest.

REMARKS

Applicants acknowledge with appreciation that the Examiner allowed claims 3 through 11, 28 through 33, 51 through 54, and 57 through 62. The Examiner objected to dependent claims 13 through 26, and 46 through 48. Applicants have rewritten claims 13, 15, 16, 17, and 25 to have an independent form that includes all limitations of claim 12; and these claims are submitted now to be of allowable form. The Examiner also objected to claims 46 through 48 that were dependent on rejected claims 1, 2 or 12. Applicants have amended claim 46 and 47 to include all limitations of claim 1 and 12, respectively, and also have amended claim 48 to depend only on claims 46 and 47. Claims 46, 47 and 48 are also submitted to now be of allowable form. Applicants added new claims 63 and 64 that have all limitations of the objected claim 48 and claim 1 and 12, respectively; the new claims 63 and 64 are also submitted to be in condition for allowance.

The Examiner rejected claims 1, 2, 12, 34 through 45, 49, 50, and 55 under 35 U.S.C. §103 as unpatentable over Rutt in view of Delange. Applicant would respectfully disagree with these rejections if applied to the claims as amended.

Applicants amended the rejected claims 1, 2, 49 and 50 to add further limitations that patentably distinguish these claims from Rutt and Delange. Applicants added positive recitations directed to the dual energy x-ray source and detector and to the operation of the whole system that uses the  $(H_T, L_T)$  and  $(H_B, L_B)$  values in determining the presence of the specific material of interest. The new device claim 65 also contains limitations directed to the dual energy x-ray source and detector of the invention and limitations directed to the treatment of the spacial distribution of the x-ray data. Claims 1, 2, 4, 9, 50, and 65 are therefore submitted to be allowable over the references of record. Claims 34, 35, 36,38,39 and 43 dependent on claims of the foregoing group and claims dependent thereon are also submitted now to be in condition for allowance.

The Examiner rejected claims 27 and 55 under 37 C.F.R. § 1.75(c) as being improper. Applicants amended claim 27 to depend on only the allowable claims 13 through 26 and also amended claim 55 to depend only on the allowed claims 51 through 54; therefore, the amended claims 27 and 55 are now in condition for allowance.

The Examiner rejected claim 56 under 35 U.S.C. §101 as nonstatutory subject matter and under 35 U.S.C. §112 as being indefinite. Applicants cancelled claim 56.

For the foregoing reasons all claims as now presently pending are submitted to be allowable over the references of record and of allowable form, and an early favorable action is respectfully requested.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

John N. Williams Reg. No. 18,948

Date: Sept 21, 1992

Fish & Richardson 225 Franklin Street Boston, MA 02110-2804

Telephone: 617/542-5070 Facsimile: 617/542-8906

ptos9434.bos